Payroll clerks, also called payroll technicians, screen timecards for calculating, coding, or other errors. They compute pay by subtracting allotments, including Federal and State taxes, retirement, insurance, and savings, from gross earnings. Increasingly, computers perform these calculations and alert payroll clerks to problems or errors in the data. In small organizations, or for new employees whose records are not yet entered into a computer system, clerks may perform the necessary calculations manually. In some small offices, clerks or other employees in the accounting department process payroll.

Payroll clerks also maintain paper backup files for research and reference. They record changes in employee addresses; close out files when workers retire, resign, or transfer; and advise employees on income tax withholding and other mandatory deductions. They also issue and record adjustments to pay because of previous errors or retroactive increases. Payroll clerks need to follow changes in tax and deduction laws, so they are aware of the most recent revisions. Finally, they prepare and mail earnings and tax withholding statements for employees' use in preparing income tax returns.

In small offices, payroll and timekeeping duties are likely to be included in the duties of a general office clerk, secretary, or accounting clerk. However, large organizations employ specialized payroll and timekeeping clerks to perform these functions.

Employment

Payroll and timekeeping clerks held about 172,000 jobs in 1998. About 35 percent of all payroll and timekeeping clerks worked in business, health, education, and social services; another 25 percent worked in manufacturing; and more than 10 percent were in wholesale and retail trade or in government. About 11 percent of all payroll and timekeeping clerks worked part time in 1998.

Job Outlook

Employment of payroll and timekeeping clerks is expected to decline through 2008, due to the continuing automation of payroll and timekeeping functions and the consolidation of clerical jobs. Nevertheless, a number of job openings should arise in coming years, as payroll and timekeeping clerks leave the labor force or transfer to other occupations. Many payroll clerks use this position as a steppingstone to higher-level accounting jobs.

As in many other clerical occupations, new technology will continue to allow many of the tasks formerly handled by payroll and timekeeping clerks to be partially or completely automated. For example, automated timeclocks, which calculate employee hours, allow large organizations to centralize their timekeeping duties in one location. At individual sites, employee hours are increasingly tracked by computer and verified by managers. This information is then compiled and sent to a central office to be processed by payroll clerks, eliminating the need to have payroll clerks at every site. In addition, the growing use of direct deposit eliminates the need to draft paychecks, because these funds are automatically transferred each pay period. Furthermore, timekeeping duties are increasingly being distributed to secretaries, general office clerks, or accounting clerks or are being contracted out to organizations that specialize in these services.

Information on working conditions, training requirements, and earnings appears in the introduction to records processing occupations.

Secretaries

(O*NET 21999C, 55102, 55105, and 55108)

Significant Points

 Increasing office automation and organizational restructuring will lead to little or no change in overall employment of secretaries.

- Employers increasingly require knowledge of software applications, such as word processing, spreadsheets, and database management.
- Job openings should be plentiful, especially for wellqualified and experienced secretaries, primarily due to the need to replace workers who leave this very large occupation.

Nature of the Work

As technology continues to expand in offices across the Nation, the role of the secretary has greatly evolved. Office automation and organizational restructuring have led secretaries to assume a wide range of new responsibilities once reserved for managerial and professional staff. Many secretaries now provide training and orientation to new staff, conduct research on the Internet, and learn to operate new office technologies. In the midst of these changes, however, their core responsibilities have remained much the same—performing and coordinating an office's administrative activities and ensuring that information is disseminated to staff and clients.

Secretaries are responsible for a variety of administrative and clerical duties necessary to run an organization efficiently. They serve as an information clearinghouse for an office, schedule appointments, provide information to callers, organize and maintain paper and electronic files, manage projects, and produce correspondence. They may also prepare correspondence, handle travel arrangements, and contact clients.

Secretaries are aided in these tasks by a variety of office equipment, such as facsimile machines, photocopiers, and telephone systems. In addition, secretaries increasingly use personal computers to run spreadsheet, word processing, database management, desktop publishing, and graphics programs—tasks previously handled by managers and other professionals. At the same time, these other workers have assumed many tasks traditionally assigned to secretaries, such as word processing and answering the telephone. Because secretaries are often relieved from dictation and typing, they can support several members of the professional staff. In a number of organizations, secretaries work in teams in order to work -flexibly and share their expertise.

Specific job duties vary with experience and titles. Executive secretaries and administrative assistants, for example, perform fewer clerical tasks than lower-level secretaries. In addition to greeting visitors, arranging conference calls, and scheduling meetings, they may handle more complex responsibilities such as conducting research, preparing statistical reports, training employees, and supervising other clerical staff.



Secretaries are responsible for a variety of administrative and clerical duties.

Some secretaries, such as legal and medical secretaries, perform highly specialized work requiring knowledge of technical terminology and procedures. For instance, legal secretaries prepare correspondence and legal papers such as summonses, complaints, motions, responses, and subpoenas under the supervision of an attorney. They also may review legal journals and assist in other ways with legal research, such as verifying quotes and citations in legal briefs. Medical secretaries transcribe dictation, prepare correspondence, and assist physicians or medical scientists with reports, speeches, articles, and conference proceedings. They also record simple medical histories, arrange for patients to be hospitalized, and order supplies. Most medical secretaries need to be familiar with insurance rules, billing practices, and hospital or laboratory procedures. Other technical secretaries who assist engineers or scientists may prepare correspondence, maintain the technical library, and gather and edit materials for scientific papers.

Working Conditions

Secretaries usually work in offices with other professionals in schools, hospitals, or in legal and medical offices. Their jobs often involve sitting for long periods. If they spend a lot of time typing, particularly at a video display terminal, they may encounter problems of eyestrain, stress, and repetitive motion, such as carpal tunnel syndrome.

Office work can lend itself to alternative or flexible working arrangements, such as part time work. In fact, 1 secretary in 5 works part time and many others work in temporary positions. A few participate in job sharing arrangements in which two people divide responsibility for a single job. The majority of secretaries, however, are full-time employees who work a standard 40-hour week.

Employment

Secretaries held about 3.2 million jobs in 1998, ranking among the largest occupations in the U.S. economy. The following tabulation shows the distribution of employment by secretarial specialty.

Secretaries, total	3,195,000
Legal secretaries	285,000
Medical secretaries	219,000
Secretaries, except legal and medical	2,691,000

Secretaries are employed in organizations of every type. About 6 out of 10 secretaries are employed in firms providing services, ranging from education and health to legal and business services. Others work for firms engaged in manufacturing, construction, wholesale and retail trade, transportation, and communications. Banks, insurance companies, investment firms, and real estate firms are also important employers, as are Federal, State, and local government agencies.

Training, Other Qualifications, and Advancement

High school graduates who have basic office skills may qualify for entry-level secretarial positions. However, employers increasingly require knowledge of software applications, such as word processing, spread-sheets, and database management. Secretaries should be proficient in keyboarding and good at spelling, punctuation, grammar, and oral communication. Shorthand is necessary for some positions. Because secretaries must be tactful in their dealings with people, employers also look for good interpersonal skills. Discretion, good judgment, organizational ability, and initiative are especially important for higher-level secretarial positions.

As office automation continues to evolve, retraining and continuing education will remain an integral part of secretarial jobs. Changes in the office environment have increased the demand for secretaries who are adaptable and versatile. Secretaries may have to attend classes to learn how to operate new office technologies, such as information storage systems, scanners, the Internet, or new updated software packages.

Secretaries acquire skills in various ways. Training ranges from high school vocational education programs that teach office skills and keyboarding to 1- to 2-year programs in office administration offered by business schools, vocational-technical institutes, and community colleges. Many temporary help agencies also provide formal training in computer and office skills. These skills are most often acquired, however, through on-the-job instruction by other employees or by equipment and software vendors. Specialized training programs are available for students planning to become medical or legal secretaries or administrative technology specialists.

Testing and certification for entry-level office skills is available through the Office Proficiency Assessment and Certification program offered by the International Association of Administrative Professionals. As secretaries gain experience, they can earn the Certified Professional Secretary (CPS) designation by meeting certain experience requirements and passing an examination. Similarly, those without experience who want to be certified as a legal support professional may be certified as an Accredited Legal Secretary (ALS) by the Certifying Board of the National Association of Legal Secretaries. This organization also administers an examination to certify a legal secretary with 3 years of experience as a Professional Legal Secretary (PLS). Legal Secretaries International confers the designation Board Certified Civil Trial Legal Secretary in specialized areas such as litigation, real estate, probate, and corporate law, to those who have 5 years of law-related experience and pass an examination.

Secretaries generally advance by being promoted to other secretarial positions with more responsibilities. Qualified secretaries who broaden their knowledge of a company's operations and enhance their skills may be promoted to other positions such as senior or executive secretary, clerical supervisor, or office manager. Secretaries with word processing experience can advance to jobs as word processing trainers, supervisors, or managers within their own firms or in a secretarial or word processing service bureau. Secretarial experience can also lead to jobs such as instructor or sales representative with manufacturers of software or computer equipment. With additional training, many legal secretaries become paralegals.

Job Outlook

Job openings should be plentiful, particularly for well-qualified and experienced secretaries, stemming from the need to replace workers who transfer to other occupations or leave this very large occupation for other reasons each year. Overall, however, little or no change is expected in employment of secretaries over the 1998-2008 period.

Projected employment of secretaries will vary by occupational specialty. Rapid growth in the health and legal services industries should lead to average growth for medical and legal secretaries. However, employment of secretaries who do not specialize in legal or medical work—about 7 out of 8—is expected to remain flat. Rapidly growing industries—such as personnel supply, computer and data processing, and management and public relations—will generate new job opportunities.

Growing levels of office automation and organizational restructuring will continue to make secretaries more productive in coming years. Personal computers, electronic mail, scanners, facsimile machines, and voice message systems will allow secretaries to accomplish more in the same amount of time. The use of automated equipment is also changing the distribution of work in many offices. In some cases, such traditional secretarial duties as typing or keyboarding, filing, copying, and bookkeeping are being assigned to workers in other units or departments. Professionals and managers increasingly do their own word processing and much of their own correspondence rather than submit the work to secretaries and other support staff. Also, in some law offices and physicians' offices, paralegals and medical assistants are assuming some tasks formerly done by secretaries. As other workers assume more of these duties, there is a trend in many offices for professionals and managers to "share" secretaries. The traditional arrangement of one secretary per manager is becoming less prevalent; instead, secretaries increasingly support systems or units. This approach often means secretaries assume added responsibilities and are seen as valuable members of a team, but it also contributes to the decline in employment projected for most secretaries.

Developments in office technology are certain to continue, and they will bring about further changes in the secretary's work environment. However, many secretarial duties are of a personal, interactive nature and, therefore, not easily automated. Responsibilities such as planning conferences, working with clients, and transmitting staff instructions require tact and communication skills. Because technology cannot substitute for these personal skills, secretaries will continue to play a key role in most organizations.

Earnings

Median annual earnings of secretaries, excluding legal and medical secretaries, were \$23,560 in 1998. The middle 50 percent earned between \$18,770 and \$29,400. The lowest 10 percent earned less than \$14,410, and the highest 10 percent earned more than \$36,050. Secretaries earn slightly more in urban areas. In 1997, median annual earnings in the industries employing the largest numbers of secretaries, excluding legal and medical secretaries, were:

Local government	\$23,900
Hospitals	23,000
Colleges and universities	22,600
Elementary and secondary schools	22,300
Personnel supply services	21,500

In 1998, median annual earnings of legal secretaries were \$30,050. Median annual earnings of medical secretaries were \$22,390 in 1998; in offices and clinics of medical doctors they earned approximately \$22,000 in 1997, and in hospitals, \$21,400.

According to the International Association of Administrative Professionals, secretaries averaged \$25,500 a year in 1998. Salaries vary a great deal, however, reflecting differences in skill, experience, and level of responsibility. Salaries also vary in different parts of the country; earnings are usually lowest in southern cities, and highest in northern and western cities. In addition, salaries vary by industry; salaries of secretaries tend to be highest in transportation, legal services, and public utilities, and lowest in retail trade and finance, insurance, and real estate. Certification in this field usually is rewarded by a higher salary.

The starting salary for inexperienced secretaries in the Federal Government was \$18,400 a year in 1999. Beginning salaries were slightly higher in selected areas where the prevailing local pay level was higher. All secretaries employed by the Federal Government averaged about \$30,200 a year in 1999.

Related Occupations

A number of other workers type, record information, and process paperwork. Among them are bookkeepers, receptionists, stenographers, personnel clerks, typists and word processors, paralegals, medical assistants, and medical record technicians. A growing number of secretaries share in managerial and human resource responsibilities. Occupations requiring these skills include office and administrative support supervisor, systems manager, office manager, and human resource specialist.

Sources of Additional Information

For information on the Certified Professional Secretary designation, contact:

► International Association of Administrative Professionals, 10502 NW Ambassador Dr., P.O. Box 20404, Kansas City, MO 64195-0404. Internet: http://www.iaap-hq.org

Information on the Board Certified Civil Trial Legal Secretary designation can be obtained from:

★ Legal Secretaries International Inc., 8902 Sunnywood Dr., Houston, TX 77088-3729. Internet: http://www.compassnet.com/legalsec

Information on the Accredited Legal Secretary and Certified Professional Legal Secretary designations is available from:

◆ National Association of Legal Secretaries, 2448 East 81st St., Suite 3400, Tulsa, OK 74137-4238. Internet: http://www.nals.org

State employment offices provide information about job openings for secretaries.

Teacher Assistants

(O*NET 31521 and 53905)

Significant Points

- Almost half of all teacher assistants work part time.
- Educational requirements range from a high school diploma to some college training.
- Employment is expected to grow faster than average due to the need to assist and monitor students, to provide teachers with clerical assistance, and to help teachers meet the education needs of a growing special education population.

Nature of the Work

Teacher assistants, also called teacher aides or instructional aides, provide instructional and clerical support for classroom teachers, allowing teachers more time for lesson planning and teaching. Teacher assistants tutor and assist children in learning class material using the teacher's lesson plans, providing students with individualized attention. Teacher assistants also supervise students in the cafeteria, schoolyard, school discipline center, or on field trips. They record grades, set up equipment, and help prepare materials for instruction.

Large school districts hire some teacher assistants to perform exclusively non-instructional or clerical tasks, such as monitoring



Teacher aides instruct and assist students.